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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,995	12/28/2001	Satoshi Fujioka	Q67929	3775

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EXAMINER

CHAU, MINH H

ART UNIT	PAPER NUMBER
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2854

10

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,995

Applicant(s)

FUJIOKA, SATOSHI

Examiner

Minh H Chau

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-18 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-12 and 19 is/are rejected.
- 7) ☒ Claim(s) 8 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1, 2, 4, 5, 10, 11 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (JP 11-138769).

With respect to claim 1, Suzuki et al. teach a recording apparatus (Figs. 1-3) comprising a feeding unit (see Fig. 2 and paragraph 16) for storing and feeding a recording medium (P), a recording unit (7) for recording information on the recording medium being fed from the feeding unit, a discharging unit (5, 6a, 6b) for discharging the recording medium transported through the recording unit, a guide member (middle-low section of Fig. 2) forming a sheet transporting surface disposed on a downstream side of the recording unit in a transporting direction of the recording medium, a transport path section which transports the recording medium in the transporting direction and which is disposed between the guide member and the recording unit, a warping part (see Fig. 2, the bending part disposed near the rollers 5, 6a & 6b) formed on at least

one of the guide member and the transport path section for warping the recording medium, a discharge roller (6b) provided downstream of a warped portion of the recording medium, the guide member is inclined with respect to the transport path section and the guide member directs the recording medium downward as the recording medium is transports in the transporting direction (see Figs. 1-3 and paragraphs 11-16 of Suzuki et al.)

With respect to claim 2, see Fig. 2 of Suzuki et al. that show the warping part includes a flat surface which is uniform over a direction orthogonal to the recording transporting direction.

With respect to claim 4, see Fig. 2 of Suzuki et al. that show a sheet discharge roller (6b) for discharging the recording medium disposed immediately after the warping part.

With respect to claim 5, see Fig. 2 of Suzuki et al. that show the warping part includes an inclined recording medium transporting surface for changing the transporting direction of the recording medium to thereby warp the recording medium.

With respect to claim 10, see Fig. 2 of Suzuki et al. that show the inclined, a recording medium transporting surface of the warping part is formed by bending a plate like member in a direction orthogonal to the medium transporting direction.

With respect to claim 11, see Fig. 8A of Suzuki et al.. that show the warping part is warped so that the printing surface of the recording medium is concavely curved.

With respect to claim 19, see Fig. 8A of Suzuki et al. that show the guide member and the transport path section are contiguous.

3. Claims 1-2, 4-5, 10-12 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Taniguro et al. (US # 6,293,670).

With respect to claim 1, Taniguro et al. teach a recording apparatus (1) comprising a feeding unit (see Fig. 4 and cols. 6-7) for storing and feeding a recording medium (P), a recording unit (7) for recording information on the recording medium being fed from the feeding unit, a discharging unit (41, 42) for discharging the recording medium transported through the recording unit, a guide member (34) forming a sheet transporting surface disposed on a downstream side of the recording unit in a transporting direction of the recording medium, a transport path section (341) which transports the recording medium in the transporting direction and which is disposed between the guide member and the recording unit, a warping part (see Fig. 8A, the bending part of the guide member 34) formed on at least one of the guide member and the transport path section for warping the recording medium and a discharged roller (41, 42) provided downstream of a warped portion of the recording medium, the guide member is inclined with respect to the transport path section and the guide member directs the recording medium downward as the recording medium is transported in the transporting direction (see Figs. 1, 8, 9 and cols. 7-10).

With respect to claim 2, see Fig. 8A of Taniguro et al. that show the warping part includes a flat surface which is uniform over a direction orthogonal to the recording transporting direction.

With respect to claim 4, see Fig. 8A of Taniguro et al. that show a sheet discharge roller (41,41) for discharging the recording medium disposed immediately after the warping part.

With respect to claim 5, see Fig. 8A of Taniguro et al. that show the warping part includes an inclined recording medium transporting surface for changing the transporting direction of the recording medium to thereby warp the recording medium.

With respect to claim 10, see Fig. 8A of Taniguro et al. that show the inclined, a recording medium transporting surface of the warping part is formed by bending a plate like member in a direction orthogonal to the medium transporting direction.

With respect to claim 11, see Fig. 8A of Taniguro et al. that show the warping part is warped so that the printing surface of the recording medium is concavely curved.

With respect to claim 12, see Figs. 8A, 9 and col. 8 of Taniguro et al. that teach an inclined angle of the inclined recoding medium transporting surface of the warping part is 5.6 ± 1 degrees or 6 degree.

With respect to claim 19, see Fig. 8A of Taniguro et al. that show the guide member and the transport path section are contiguous.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-5, 10, 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyasaka et al. (JP 11-30180) in view of Saito et al. (US # 5,805,176).

With respect to claim 1, Miyasaka et al. teach a recording apparatus (Figs. 1-2) comprising a feeding unit (lower-left of Fig. 2) for storing and feeding a recording medium (24), a recording unit (36) for recording information on the recoding medium being fed from the

feeding unit, a discharging unit (48, 28) for discharging the recording medium transported through the recording unit, a guide member (Fig. 1, the section right after the recording unit 36) forming a sheet transporting surface disposed on a downstream side of the recording unit in a transporting direction of the recording medium, a transport path section which transports the recording medium in the transporting direction and which is disposed between the guide member and the recording unit, a warping part (see Fig. 1, the inclined part of the guide member right after the recording unit 36) formed on at least one of the guide member and the transport path section for warping the recording medium, the guide member is inclined with respect to the transport path section and the guide member directs the recording medium downward as the recording medium is transported in the transporting direction (see Figs. 1, 8, 9 and cols. 7-10).

Miyasaka et al. teach all the limitation as explained above, except for a discharged roller provided downstream of a warped portion of the recording medium. Saito et al. teach a printing device including a discharged roller (71, 72) provided downstream of a warped portion of the recording medium (see Fig. 12b of Saito et al.).

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the device of Miyasaka et al. to include a discharged roller provided downstream of a warped portion of the recording medium as taught by Saito et al. so that to prevent the recording medium from coming in contact with or rubbing against the print head.

With respect to claim 2, see Fig. 1 of Miyasaka et al. that show the warping part includes a flat surface which is uniform over a direction orthogonal to the recording transporting direction.

With respect to claim 3, see Fig. 1 and paragraph 5 of Miyasaka et al. that teach a sheet suction unit (52) for sucking the recording medium disposed near the warping part.

With respect to claim 4, Miyasaka et al. teach all the limitation as explained above, except for a discharge roller disposed immediately after the warping part. Saito et al. teach a printing device including a discharged roller (71, 72) disposed immediately after the warping part (the inclined surface of the guide 51) (see Fig. 12b of Saito et al.).

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the device of Miyasaka et al. to include a discharge roller disposed immediately after the warping part as taught by Saito et al. so that to prevent the recording medium from coming in contact with or rubbing against the print head.

With respect to claim 5, see Fig. 1 of Miyasaka et al. that show the warping part includes an inclined recording medium transporting surface for changing the transporting direction of the recording medium to thereby warp the recording medium.

With respect to claim 10, see Fig. 1 of Miyasaka et al. that show the inclined recording medium transporting surface of the warping part is formed by bending a plate like member in a direction orthogonal to the medium transporting direction.

With respect to claim 11, see Fig. 1 of Miyasaka et al. that show the warping part is warped so that the printing surface of the recording medium is concavely curved.

With respect to claim 19, see Fig. 1 of Miyasaka et al. that show the guide member and the transport path section are contiguous.

6. Claims 6, 7 and 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Miyasaka et al. (JP 11-30180) in view Yamada et al. (JP 11-268857).

With respect to claims 6 and 9, Miyasaka et al. teach a recording apparatus (Figs. 1-2) comprising a feeding unit (lower-left of Fig. 2) for storing and feeding a recording medium (24), a recording unit (36) for recording information on the recording medium being fed from the feeding unit, a discharging unit (48, 28) for discharging the recording medium transported through the recording unit, a transport path section which transports the recording medium in the transporting direction and which is disposed between the guide member and the recording unit, a warping part (see Fig. 1, the inclined part of the guide member right after the recording unit 36) formed on the guide member for warping the recording medium, the guide member being inclined with respect to the transport path section and the guide member directs the recording medium downward as the recording medium is transported in the transporting direction (see Figs. 1, 8, 9 and cols. 7-10).

Miyasaka et al. teach all the limitations as explained above, except for the “supporting parts ... side edges” (lines 13-14 of claim 6 and claim 9). Yamada et al. teach a recording apparatus including ribs or supporting parts (18, 20, 22) formed on the guide member for supporting the middle and both side edges of the recording medium (8) (see Fig. 1 and paragraph 8-11 of Yamada et al.).

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the guide member of Miyasaka et al. to include the supporting parts that support on both side edges of the recording medium as taught by Yamada et al. for the advantage of allowing the recording medium being smoothly conveyed downward from the printing section.

With respect to claim 7, Miyasaka et al. teach all the limitations as explained above, except for the “supporting parts ... transporting surface” (lines 5-6 of claim 7). Yamada et al. teach a recording apparatus including ribs or supporting parts (18, 20, 22) having support surface, which are flush with the recording medium transporting surface (see Fig. 1 of Yamada et al.). In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the guide member with a warping part of Miyasaka et al. to include the supporting part that are flush with the recording medium transporting surface as taught by Yamada et al. so as to allowing the recording medium being smoothly transports downstream.

Allowable Subject Matter

7. Claims 8 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 14-18 are allowed.

Response to Arguments

8. Applicant's arguments filed 01/23/03 have been fully considered but they are not persuasive.

With respect to the argument in section II, item A under 35 U.S.C. 102 (b) of claims 1-3 and 5 in view of Miyasaka. With respect to the rejection of claim 1, first, the Applicant has argued that claim 1 is not anticipated by Miyasaka, since claim 1 has been amended, therefore a new ground of rejection have been applied to claims 1-5, 10, 11 and 19 under 35 U.S.C. 103(a).

Second, the Applicant also argued that Miyasaka does not teach or suggest a guide member inclined with respect to a transport path section as recited in claim 1, the Examiner respectfully disagree with the Applicant's opinion because the bend section right after the recording unit 36 does warping or bending the recoding medium downward and the guide member with the bending section as taught by Miyasaka does incline with respect to the transport path section. With respect to claims 2-3 and 5, since the Applicant does not provide separate argument for these claims, therefore these claims are stand or fails with the independent claim 1.

With respect to the argument in section II, item B under 35 U.S.C. 102 (b) of claims 1-2, 4-5 and 10 in view of Suzuki. With respect to claim 1, the Applicant has argued that Suzuki does not teach or suggest a discharge roller is provided downstream of a warp portion of the recording medium as recited in claim 1, the Examiner respectfully disagree with the Applicant's opinion because Suzuki does teach a discharge roller (6b) provided downstream of a warp portion of the recoding medium (see Fig. 3). With respect to claims 2, 4-5 and 10, since the Applicant does not provide separate argument for these claims, therefore these claims are stand or fails with the independent claim 1.

With respect to the argument in section III, under 35 U.S.C. 102 (e) of claims 1-2, 4-5 and 10-12 as being anticipated by Taniguro. With respect to claim 1, the Applicant has argued that the portion of platen 34 to the left of bend portion 34a is declined in a sheet transporting direction, not inclined in a transporting direction as the guide member recited in claim 1, the Examiner respectfully disagree with the Applicant's opinion because the bend portion of the platen or guide member 34 as taught by Taniguro does meet the broad recitation "inclined" as recited in claim 1. With respect to claims 2, 4-5 and 10-12, since the Applicant does not provide

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separate argument for these claims, therefore these claims are stand or fails with the independent claim 1.

With respect to the argument in section IV, under 35 U.S.C. 103 (a) of claims 6, 7 and 9 as being unpatentable over Miyasaka in view of Yamada. With respect to claim 6, the only argument that Applicant provided is that claim 6 contains similar limitations as recited in claim 1, and Yamada fails to cure the deficiencies of Miyasaka which were discussed above, therefore claim 6 is not rendered obvious over the combination of both references, the Examiner has response to the argument with respect to claim 1 as explained above, and since claim 6 contains similar limitations as recited in claim 1, therefore claim 6 is rendered obvious over the combination of Miyasaka and Yamada. With respect to claims 7 and 9 since the Applicant does not provide separate argument for these claims, therefore these claims are stand or fails with the independent claim 6.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh H Chau whose telephone number is (703) 305-0298. The examiner can normally be reached on M - TH from 9:30 AM – 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MHC
April 2, 2003



ANDREW H. HIRSHFELD
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